



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,722	06/26/2003	Ajith Kuttannair Kumar	130436/GETS 5313.1	3463
321	7590	06/28/2004	EXAMINER	
SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			MCCARRY JR, ROBERT J	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,722

Applicant(s)

KUMAR ET AL.

Examiner

Robert J. McCarry, Jr.

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: on page 12, line 9 of the specification the applicant has numbered the call for low tractive effort 1002. In light of the rest of the specification and the drawings the Examiner understands, for examining purposes, this should actually be number 1102.

Page 13 line 12 of the specification the applicant has numbered the effectiveness detection 1208. In light of the rest of the specification and the drawings the Examiner understands, for examining purposes, this should actually be number 1210. The Drawings have also been objected to based on this error since part number 1210 is shown in the drawings but not in the specification.

Appropriate correction is required.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1114" has been used to designate both the consist/train information and the step to dispense friction enhancing material. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 1210 the effectiveness detection step. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 46 is objected to because of the following informalities: Claim 46, drawn to the method of operating, is shown to depend from claim 10. Claim 10 does not disclose a method and is in fact a dependent apparatus claim. For Examining purposes the Examiner has interpreted claim 46 to depend from claim 42 since it is written similarly to previous claim 45. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-15, 16, 17, 19, 20, 23-38, 40, 42-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Mesalic et al (US 6,276,281).

Mesalic et al discloses a friction management system, and method for operating, for a railway train for managing and controlling the application of a friction modifying element to an area of contact between the rail and the wheel of the rail car. The system is comprised of a plurality of sensors 22 for detecting the parameters of the train speed and the tractive effort of the wheels. The sensor 22 is connected to a controller 16, which sends a signal to an applicator 34 to apply the friction modifying material to the top of the rail in front of the foremost wheel of the vehicle. In this case the friction modifying material is compressed air and is used to clear debris such as snow from the rails and modify the coefficient of friction of the wheels of the locomotive on the rails. The compressed air would increase the coefficient of friction by clearing away slippery substances such as snow or ice which would cause the wheel of the train to slip, or the compressed air could clear away rocks and other larger debris that cause the wheel to not move thereby decreasing the coefficient of friction. The system is also takes into account auxiliary data, which includes the ambient temperature and weather. The system also controls the time the air compressor is on and can also control the amount

of air dispensed. As stated in column 6, lines 3-16 the time of the air compressor can be set to be on for 20 seconds and off for 300 seconds. Also stated in column 6, lines 45-50 the compressor can be set to 70 psi in the compressor with an airflow of 45 CFM.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 18, 21, 22, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesalic et al in view of Kumar (US 5,896,947).

Mesalic et al discloses a system and method for applying a friction modifying agent to a rail as disclosed above. However, Mesalic et al does not specifically show the placement of applicators before and after specific cars. Kumar discloses a friction modifying system where the applicators are placed ahead of the front wheels and behind the rear wheels of the plurality of locomotives on the train. This feature is shown in figures 1, 2 and 3. It would have been obvious to one of ordinary skill in the art to position the applicators so that they are prior to and aft of the wheels of the locomotive so that the proper friction enhancement is made for both the locomotives as well as the following train cars.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. McCarry, Jr. whose telephone number is (703)

Art Unit: 3617

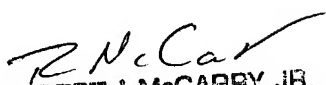
305-0581. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJM

June 22, 2004


ROBERT J. MCCARRY, JR.
PATENT EXAMINER

3617
6/21/04